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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,956	09/18/2001	Motohiro Tanno	3815/131	8525
29858	7590	11/04/2004	<div>EXAMINER</div> <div>HOOSAIN, ALLAN</div>	
BROWN, RAYSMAN, MILLSTEIN, FELDER & STEINER LLP 900 THIRD AVENUE NEW YORK, NY 10022			<div>ART UNIT</div> <div>2645</div>	<div>PAPER NUMBER</div>
DATE MAILED: 11/04/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/954,956

Applicant(s)

TANNO ET AL

Examiner

Allan Hoosain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

FINAL DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by **Sarkar** (US 6,363,060).

As to Claims 1,9,21, with respect to Figures 4-6, **Sarkar** teaches a cell search method for a mobile station in a mobile communication system, the method comprising a first step of:

despreading a received signal using a common spreading code common to all slots and detecting slot boundaries on the basis of SSC and PSC (first average correlation coefficient) (Figure 4, label 104),

a second step of despreading the signal on the basis of said slot boundaries detected at the first step, using different individual spreading codes for said respective slots (Col. 7, lines 12-27), and

detecting frame boundaries and a scramble code group on the basis of a SSC,PSC,Pilot (second average correlation coefficient) (Figure 4, label 108), and

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a third step of descrambling a common pilot signal on the basis of said frame boundaries and scramble code group detected at the second step (Col. 8, lines 54-65), and

detecting a scramble code on the basis of a third average correlation coefficient, the method being characterized in that:

the detection results for said frame boundaries and scramble code are judged on the basis of a ratio of the largest one of a plurality of said third average correlation coefficients to a predetermined reference value (Col. 8, lines 22-27 and Col. 9, lines 24-31).

As to Claims 2,10,14,22, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value is set on the basis of interference power calculated from said received signal by said mobile station (Col. 9, lines 5-11).

As to Claims 3,12,15,23, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value is set on the basis of said plurality of third average correlation coefficients except the largest one thereof (Col. 8, lines 44-47 and 59-65).

As to Claims 4,16,24, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 3, characterized in that said reference value is an average or a median of said plurality of third average correlation coefficients except the largest one thereof (Col. 10, lines 23-48).

As to Claims 5,17, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value is set on the basis of a plurality of said second average correlation coefficients except the largest one thereof (Col. 8, lines 44-47 and 59-65).

As to Claims 6,18, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 5, characterized in that said reference value is an average or a median of said plurality of second average correlation coefficients except the largest one thereof (Col. 10, lines 23-48).

As to Claims 7,19, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 1, characterized in that said reference value can be set on the basis of a plurality of said first average correlation coefficients (Col. 8, lines 38-44).

As to Claims 8,20, **Sarkar** teaches the cell search method for a mobile station in a mobile communication system according to Claim 7, characterized in that said reference value is an average or a median of an arbitrary number of said first average correlation coefficients selected from said plurality of first average correlation coefficients in the ascending order of the value (Col. 10, lines 38-48).

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As to Claim 13, with respect to Figures 4-7, **Sarkar** teaches a cell search apparatus for a mobile station in a mobile communication system, the apparatus comprising:

a first detector for despreading a received signal using a common spreading code common to all slots and detecting slot boundaries on the basis of a first average correlation coefficient (Figure 6, label 206),

a second detector for despreading the signal on the basis of said slot boundaries detected at the first step, using different individual spreading codes for said respective slots, and detecting frame boundaries and a scramble code group on the basis of a second average correlation coefficient (Figure 6, label 208), and

a third detector for descrambling a common pilot signal on the basis of said frame boundaries and scramble code group detected at the second step, and detecting a scramble code on the basis of a third average correlation coefficient (Figure 3, label 210), the apparatus being characterized by comprising:

judgement means for judging the detection results for said frame boundaries and scramble code on the basis of a ratio of the largest one of a plurality of said third average correlation coefficients to a predetermined reference value (Figure 7).

Response to Arguments

3. Applicant's arguments filed in the 6/25/04 Remarks have been fully considered but they are not persuasive because of the following:

The argument that **Sarkar** does not teach the third step and in particular the detection results are not convincing because it is directed to the teachings in the disclosure which are not

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claimed. For example, the argument cited Page 17, line 23 to Page 18, line 18 which teaches "...determines the average or median of the seven average correlation values excluding the largest one ..." and "... eliminates the need to separately measure the interference power as described ...". These limitations are not in the claims. The claims only recite judging detection results on the basis of the third average correlation coefficient and predetermined reference value. **Sarkar** teaches judging detection results based on PSC3 (third average correlation coefficient) to a pilot signal (predetermined reference value) in the cited passages.

Examiner respectfully invites Applicants to contact Examiner to discuss possible amendments for overcoming the prior art of record.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sriram et al. (US 6,754,251) teach shortening searches for code words to produce synchronization.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:

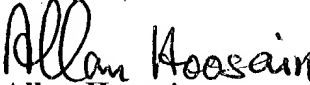
(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (703) 305-4012. The examiner can normally be reached on Monday to Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (703) 305-4895.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


Allan Hoosain
Primary Examiner
10/21/04